

CLAIMS

1. A kitchen-range (1) of the type that has a cooking top (13) comprising a surface (22), wherein at least one heating device (15) and a support means (14), especially a grate, are arranged, and a cover (16) that can cover it at least partly; the kitchen-range (1) being characterized by further comprising:
 - a first cleaning-element spraying assembly (6, 7), arranged in the cooking top (13), said surface (22) of the latter being inclined with respect to the horizontal plane, so the sprayed elements can flow into a drain opening (8) connected to a re-feeding circuit (4, 5, 19) for feeding cleaning elements back to said first spraying assembly (6, 7);
 - a cleaning-element delivering valve (20a) connecting an external source to said circuit, and a cleaning-element draining valve (20b) connecting the circuit to an external drain means; and
 - control means (51) to open and close the valves, enabling the cleaning elements to get into and out of the cleaning circuit, and to turn on and off said valves (20a, 20b), initiating and finishing the circulation of the cleaning elements in the circuit.
2. A kitchen-range (1) according to claim 1, characterized in that said re-feeding circuit comprises at least one first conduit (5) connecting the drain opening (8) to propelling means, and at least one second conduit (4) connecting the propelling means to the first spraying assembly (6, 7).
3. A kitchen-range (1) according to claim 1 or 2, characterized by including an oven (100) of the type that comprises a cooking chamber (113) with heating devices (115), support means (114), especially grates, arranged in the chamber (113), and a cover (116) to cover it, the oven (100) comprising:
 - a second cleaning-element spraying assembly (107) arranged in the cooking chamber (113), the base surface (122) of the latter being inclined, so that the sprayed elements can flow to a portion where the second drain opening (108) is arranged;
 - at least one third conduit (105) connecting the second drain o-

pening (108) to the propelling means, and at least one fourth conduit (104) connecting the propelling means to the second spraying assembly (107), so that the second opening (108), the third conduit (105), the propelling means, the fourth conduit (104), the second spraying conduit (107) and the base surface (122) will form a cleaning-element circuit.

5 4. A kitchen-range according to any one of claims 1 to 3, characterized in that the cleaning elements are cleaning liquids.

10 5. A kitchen-range according to any one of claims 1 to 4, characterized in that the propelling means are a pump (19).

6. A kitchen-range according to any one of claims 1 to 5, characterized in that the cleaning-element delivering valve (9) is connected to the entrance of the pump (19) by means of a reservoir (2).

7. A kitchen-range according to claim 6, characterized in that the circuit comprises cleaning-element heating means.

15 8. A kitchen-range according to any one of claims 1 to 7, characterized in that the spraying means consist of at least one spraying arm (7, 107) and a sprayer (6).

9. A kitchen-range according to any one of claims 1 to 8, characterized in that the first (8) and the second (108) openings include filters (21, 20 121).

10. A kitchen-range according to any one of claims 1 to 9, characterized in that the control means (51) comprise at least one from an electronic circuit and a timer.

25 11. A kitchen-range according to any one of claims 1 to 10, characterized in that the valves (9, 10) are pumps.

12. An oven (100) of the type that comprises a cooking chamber (113) with heating devices (115), support means (114), especially grates, arranged in the chamber (113), and a cover (116) to cover it; the oven (100) being characterized by further comprising:

30 - a cleaning-element spraying assembly (107) arranged in the cooking chamber (113), a base surface (122) of the latter being inclined, so that the sprayed elements can flow to a portion where the drain opening

(108) connected to a re-feeding circuit (104, 105, 19) for feeding cleaning elements back to the first spraying assembly (106, 107);

- a cleaning-element delivering valve (20a) connecting an external source to said circuit, and a cleaning-element draining valve (20b) connecting the circuit to an external drain means; and

- control means (51) to open and close the valves (20a, 20b), allowing the cleaning elements to get into and out of the circuit, and to turn on and off the propulsion means, initiating and finishing the circulation of the elements in the circuit.

10 13. An oven (100) according to claim 12, characterized in that said re-feeding circuit comprises at least one first conduit (105) connecting the opening of the drain opening (108) to propelling means, and at least one second conduit (104) connecting the propelling means to the first spraying assembly (106, 107).

15 14. An oven according to claim 12 or 13, characterized in that the cleaning elements are cleaning liquids.

15. An oven according to any one of claims 12 to 14, characterized in that the propelling means are a pump (19).

16. An oven according to any one of claims 12 to 15, characterized in that the cleaning-element delivering valve (20a) is connected to the entrance of the pump (19) by means of a reservoir (2).

17. An oven according to any one of claims 12 to 16, characterized in that the circuit comprises a cleaning-elements heating means.

18. An oven according to any one of claims 12 to 17, characterized in that the spraying means comprise at least one spraying arm (107) and a sprayer (106).

19. An oven according to any one of claims 12 to 18, characterized in that the opening (108) may include a filter (121).

20. A self-cleaning assembly attachable to a cooking apparatus, especially a kitchen-range or an oven, characterized by comprising:

- at least one first conduit (205) capable of connecting a drain opening in said cooking apparatus to propelling means, and at least one se-

cond conduit (204) capable of connecting the propelling means (219) to a spraying assembly on the cooking apparatus, so that the opening, the first conduit, the propelling means, the second conduit, the spraying assembly will form a cleaning circuit;

- 5 - a cleaning-element delivering valve (209) connecting an external source to said circuit, and a cleaning-liquid draining valve (210) connecting the circuit to an external drain means.